

In the Claims

1-9. (cancelled)

10. (currently amended) A process for producing adhesion elements on a substrate, comprising the steps of:

introducing thixotropic plastic material of polyvinyl siloxane having a viscosity of 7,000 to 15,000 mPas measured with a rotary viscosimeter into at least one shaping element; and

forming the plastic material into at least 16,000 adhesion elements with flared ends per cm^2 accomplishing adhesion predominantly by van-der-Waals forces, the flared ends forming heads with essentially flat end surfaces, the adhesion elements having stem parts with a height from 50 μm to 150 μm and with a diameter from 10 μm to 40 μm , the flared ends having a diameter from 15 μm to 70 μm .

11-12. (cancelled)

13. (previously presented) A process according to claim 10 wherein the viscosity is approximately 10,000 mPas at a shear rate of 10 1/sec.

14. (previously presented) A process according to claim 10 wherein the shaping element is a drum-shaped screen having at least 16,000 mold cavities per cm^2 .

15. (cancelled)

16. (previously presented) A process according to claim 14 wherein each of the mold cavities has a hyperboloid shape.

17. (previously presented) A process according to claim 10 wherein the plastic material has a contact angle greater than 60 degrees due to surface energy for wetting with water.

18. (previously presented) A process according to claim 17 wherein the contact angle is greater than 70 degrees.

19. (cancelled)

20. (previously presented) A process according to claim 10 wherein the height of the stems is approximately 90 μm ;
the diameter of the stems is approximately 30 μm ; and
the diameter of the flared end is approximately 50 μm .

21. (previously presented) A process according to claim 10 wherein the plastic material is cross-linked with or after molding of the adhesion elements.

22. (currently amended) A process for producing adhesion elements on a substrate, comprising the steps of:

introducing thixotropic plastic material of polyvinyl siloxane having a viscosity of 7,000 to 15,000 mPas measured with a rotary viscosimeter into at least one shaping element; and

forming the plastic material into at least 16,000 adhesion elements with flared ends per cm^2 accomplishing adhesion predominantly by van-der-Waals forces, the flared ends forming heads with slightly convex end surfaces, the adhesion elements having stem parts with a height from 50 μm to 150 μm and with a diameter from 10 μm to 40 μm , the flared ends having a diameter from 15 μm to 70 μm .

23-24. (cancelled)

25. (previously presented) A process according to claim 22 wherein the viscosity is approximately 10,000 mPas at a shear rate of 10 1/sec.

26. (previously presented) A process according to claim 22 wherein the shaping element is a drum-shaped screen having at least 16,000 mold cavities per cm^2 .

27. (cancelled)

28. (previously presented) A process according to claim 26 wherein each of the mold cavities has a hyperboloid shape.

29. (previously presented) A process according to claim 22 wherein
the plastic material has a contact angle greater than 60 degrees due to surface energy for wetting with water.

30. (previously presented) A process according to claim 29 wherein
the contact angle is greater than 70 degrees.

31. (cancelled)

32. (previously presented) A process according to claim 22 wherein
the height of the stems is approximately 90 μm ;
the diameter of the stems is approximately 30 μm ; and
the diameter of the flared end is approximately 50 μm .

33. (previously presented) A process according to claim 22 wherein
the plastic material is cross-linked with or after molding of the adhesion elements.

34. (currently amended) A process for producing adhesion elements on a substrate,
comprising the steps of:

introducing thixotropic plastic material of polyvinyl siloxane having a viscosity of 7,000
to 15,000 mPas measured with a rotary viscosimeter into at least one shaping element; and

forming the plastic material into at least 16,000 adhesion elements with flared ends per
 cm^2 accomplishing adhesion predominantly by van-der-Waals forces, the flared ends forming

heads with end surfaces having a concavity, the adhesion elements having stem parts with a height from 50 μm to 150 μm and with a diameter from 10 μm to 40 μm , the flared ends having a diameter from 15 μm to 70 μm .

35-36. (cancelled)

37. (previously presented) A process according to claim 34 wherein the viscosity is approximately 10,000 mPas at a shear rate of 10 1/sec.

38. (previously presented) A process according to claim 34 wherein the shaping element is a drum-shaped screen having at least 16,000 mold cavities per cm^2 .

39. (cancelled)

40. (previously presented) A process according to claim 38 wherein each of the mold cavities has a hyperboloid shape.

41. (previously presented) A process according to claim 34 wherein the plastic material has a contact angle greater than 60 degrees due to surface energy for wetting with water.

42. (previously presented) A process according to claim 41 wherein the contact angle is greater than 70 degrees.

43. (cancelled)

44. (previously presented) A process according to claim 34 wherein

the height of the stems is approximately 90 μm ;

the diameter of the stems is approximately 30 μm ; and

the diameter of the flared end is approximately 50 μm .

45. (previously presented) A process according to claim 34 wherein

the plastic material is cross-linked with or after molding of the adhesion elements.